

sketch.ino

diagram.json

libraries.txt

Library Manager

```

11 char server[] = ORG ".messaging.internetofthings.ibmcloud.com";
12 char publishTopic[] = "iot-2/evt/Data/fmt/json";
13 char subscribeTopic[] = "iot-2/cmd/test/fmt/String";
14 char authMethod[] = "use-token-auth";
15 char token[] = TOKEN;
16 char clientID[] = "d:" ORG ":" DEVICE_TYPE ":" DEVICE_ID;
17
18 WiFiClient wificlient;
19 PubSubClient client(server, 1883, callback, wificlient);
20
21
22
23
24 // should match the Beta Coefficient of the thermistor
25
26 void setup() {
27   Serial.begin(9600);
28   analogReadResolution(10);
29   pinMode(32, INPUT);
30   pinMode(14, OUTPUT);
31   pinMode(2, OUTPUT);
32
33   wificlient.connect();
34   mqttconnect();
35
36 }
37 void loop() {
38   const float BETA = 3950; // should match the Beta Coefficient of the thermistor
39   int analogValue = analogRead(A4);
40   float temp = 1 / (log(1 / (1023. / analogValue - 1)) / BETA + 1.0 / 298.15) -

```

Simulation

00:09.374

99%

NTC Temperature Sensor (analog)

Temperature: 2.4°C

publish ok

Temperature: 2.39 °C

Sending payload:{"temp":2.39}

publish ok

Temperature: 2.39 °C

Sending payload:{"temp":2.39}

publish ok

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```

Simulation

00:13.703

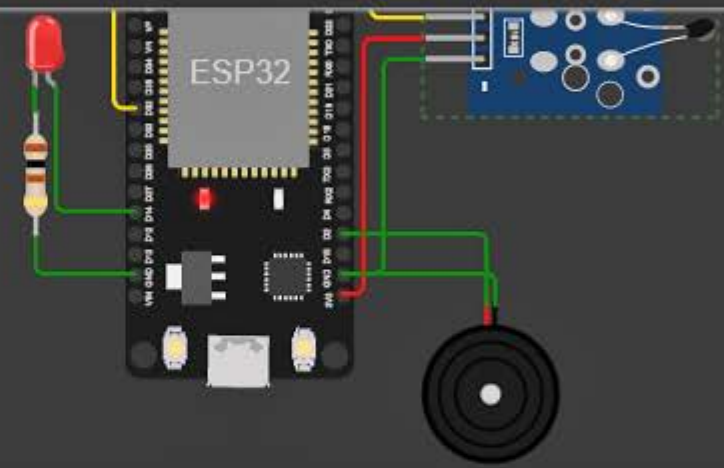
95%



NTC Temperature Sensor (analog)

Temperature:

-19.7°C



```

publish ok
Temperature: -19.73 °C
Sending payload:{"temp":-19.73}
publish ok
Temperature: -19.73 °C
Sending payload:{"temp":-19.73}
publish ok

```



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```

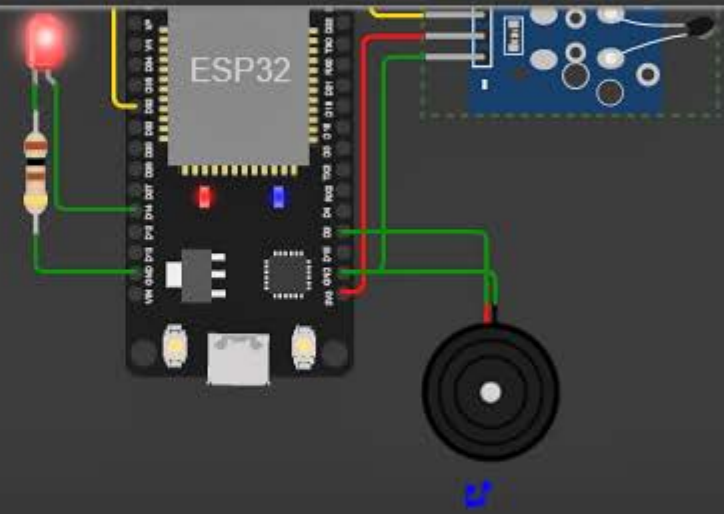
Simulation

00:20.746 92%



NTC Temperature Sensor (analog)

Temperature:  53.9°C



```

Sending payload:{"temp":53.93}
publish ok
Temperature: 53.93 °C
Sending payload:{"alert":53.93}
publish ok
Sending payload:{"temp":53.93}
publish ok

```

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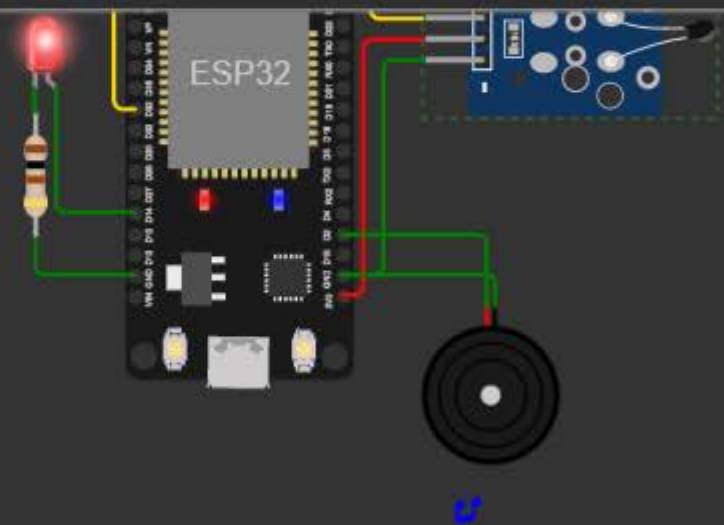
Simulation

00:25.092 98%



NTC Temperature Sensor (analog)

Temperature: 79.7°C



```

Sending payload:{"temp":53.93}
publish ok
Temperature: 79.79 °C
Sending payload:{"alert":79.79}
publish ok
Sending payload:{"temp":79.79}
publish ok

```



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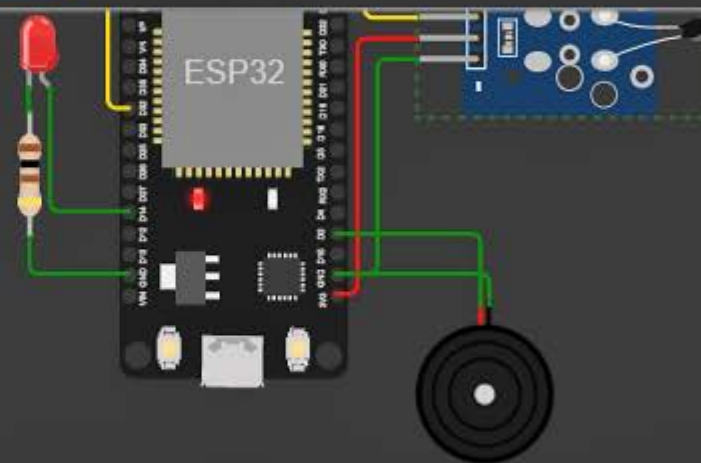
Simulation

00:28.756 99%



NTC Temperature Sensor (analog)

Temperature: 17.1°C



publish ok

Temperature: 17.08 °C

Sending payload:{"temp":17.08}

publish ok

Temperature: 17.08 °C

Sending payload:{"temp":17.08}

publish ok